

KDS Maintenance Log/Procedures

KDS will follow the UAS manufacturer's maintenance, overhaul, replacement, inspection, safety bulletins, and life-limit requirements for the aircraft and aircraft components.

KDS will maintain a written log book for their Agras T16 aircraft, N318KD, to keep track of dates, flight time and maintenance.

DJI Agras T16 Maintenance

1. Remote Controller Maintenance

1. During usage, use the remote controller strap to avoid water or pesticide erosion.
2. After usage, use a cloth dipped in ethyl alcohol to clean the remote controller, and then stow the remote controller screen to ensure it remains clean.
3. During transportation, fold the remote controller's antenna to avoid damage.
4. For extended periods without usage, take the battery out and store it in an antiexplosion box in a cool and shaded environment to avoid over-discharging.

2. Aircraft Cleaning and Maintenance

1. Wear protective equipment Before cleaning, wear a gauze mask, gloves, and other protective equipment to avoid pesticide damage to the skin.
2. Water tank, water pump, and pipeline cleaning After usage, pour clean water into the water tank, add the cleansing liquid, start the water pump to clean the whole spraying system, and repeat 2-3 times. After using pesticides containing herbicides, the tank should be cleaned with special care to avoid secondary use phytotoxicity.
3. Nozzle and strainer cleaning Use a soft toothbrush to clean the nozzle and strainer. After cleaning, soak the nozzle and strainer in clean water. While

choosing the pesticide, avoid using powder and high concentrations of miscible oil.

4. Aircraft cleaning Use a wringed-out wet cloth to clean different parts of the aircraft, including the aircraft body, arms, motors, propellers, water tanks, radars, landing gears, etc., and dry them after cleaning. Do not use a water pipe or high-pressure water gun to wash them directly.

5. Pipeline maintenance Avoid breaking or pressing pesticide pipelines during storage and transportation. Deformed pipelines will seriously affect the effectiveness of spraying. When handling or moving the drone, lift it by the frame arms.

6. Transportation During transportation, stow the aircraft carefully to avoid damage, ensuring that the arms of the aircraft are properly supported. Also, make sure that the pesticide is properly transported to avoid exposure to the operators

3. Propeller Maintenance

1. Check regularly for signs of breakages or cracks on the propellers and differentiate CW and CCW while changing the propellers.

2. Check regularly for any noise or resistance during motor rotation. If any issues are discovered, replace the motor.

Maintenance test flights

1. Maintenance test flights are required for any dynamic component replacement.
2. Locate T16 in secure open safe area. Restrict personnel in vicinity. Ground run aircraft, looking for vibrations, abnormalities. If good, launch to a hover, turn aircraft and check control response. Make brief flight. Land and sign off log book.
3. Checking the spray system after nozzle, lines or pump replacement can be done from the ground with the RC and without rotors turning. Turn on sprayer with RC. Calibrate pumps if required.

